

DEPARTMENT OF HEALTH AND HUMAN SERVICES

PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL

MINUTES OF MEETING

Immunization Practices Advisory Committee
May 5-6, 1980
Atlanta, Georgia

The Immunization Practices Advisory Committee (ACIP) met in Building 3, Room B-19, at the Center for Disease Control in Atlanta, Georgia, on May 5-6, 1980. Those in attendance are listed below:

COMMITTEE MEMBERS PRESENT

Dr. Thomas M. Vernon, Jr., Chairman
Dr. James Chin
Dr. Suzanne E. Dandoy
Dr. John B. DeHoff
Dr. Maxine Hayes
Dr. Edwin D. Kilbourne
Dr. William M. Marine
Dr. Jay P. Sanford
Dr. Gary Smith
Dr. Catherine M. Wilfert

Ex-Officio Members

Dr. William S. Jordan, Jr.

Liaison Representatives

Dr. J. M. S. Dixon (NACI)
Dr. Asher J. Finkel (AMA)
Dr. Peter A. Flynn, Capt. USN (DOD)

Executive Secretary

Dr. J. Donald Millar

COMMITTEE MEMBERS ABSENT

Ex-Officio

Dr. Harry Meyer, Jr., BOB

Liaison Representatives

Dr. Edward A. Mortimer, Jr. (AAP)

HHS STAFF PRESENT

BUREAU OF BIOLOGICS, FDA

Dr. Francis A. Ennis
Dr. Robert Gerety

CENTER FOR DISEASE CONTROL

Office of Center Director

Mr. Donald A. Berreth
Dr. Walter R. Dowdle
Mr. Gene W. Matthews
Mr. William C. Watson

CENTER FOR DISEASE CONTROL (continued)

Bureau of Epidemiology

Dr. Philip S. Brachman
Dr. Donald P. Francis
Dr. L. B. Schonberger
Dr. Stephen B. Thacker

Bureau of Laboratories

Dr. Adrian Chappell
Dr. Alan P. Kendal
Dr. James H. Nakano
Dr. Gary R. Noble

Bureau of Smallpox Eradication

Dr. T. Stephen Jones
Dr. J. Michael Lane

Bureau of State Services

Dr. Roger Bernier
Dr. James Curran
Dr. Frank DeStefano
Dr. Alan R. Hinman
Dr. Timothy F. Nolan
Dr. Marjorie P. Pollack
Dr. S. E. Thompson

OTHERS PRESENT

Mr. A. Boudreault
Dr. M. T. Burke
Colonel Alfred K. Cheng
LTC Frederick J. Erdmann
Mr. Geoffrey H. Kalish
Ms. Ann L. Larson
Capt. Russell L. Marlor
Mr. Douglas B. Reynolds
Ms. Karlyn L. Shedlowski
Mr. Charles Taylor
Mr. Jack Timko
Mr. Timothy Williamson

Dr. Vernon called the meeting to order at 8:30 a.m. on May 5, 1980. Dr. Millar noted that the Committee had been displaced to this room (Building 3, Room B-19) because of construction going on in Dr. Foege's suite of offices. He hoped that the Committee would be back in its usual meeting place, Conference Room 207, by the time of the fall meeting.

After preliminary announcements, Committee Members raised the issue that the cost of the lodging at the Sheraton-Emory Motel now roughly equates to the entire per diem allowance, so that the costs of meals and other expenses were thus "out of pocket." Dr. Millar indicated that he would look into this to see if any relief were possible for the next meeting.

EMERGING ISSUES IN MEASLES, ADULT IMMUNIZATION AND ADVERSE REACTION SURVEILLANCE

Dr. Vernon then called on Dr. Hinman to open the discussion. Dr. Hinman presented a summary of some questions received by the Immunization Division regarding interpretation of ACIP recommendations. The first of these concerned enforcement of school immunization requirements for rubella, specifically in postpubertal females. Some health workers have noted the difference in wording of the measles and rubella statements in that enforcement of school immunization requirements at all levels are clearly spelled out for measles vaccine, but not as clearly spelled out for rubella vaccine. In the discussion, it became clear that Committee members favored the existence and enforcement of rubella immunization requirements at all grade levels. In a similar vein, questions have been raised about the Committee's views on college immunization requirements for measles or rubella (or other vaccines). In discussion, it became apparent that Committee members favored immunization requirements for college attendance as a means of further strengthening the approach to ensure protection in young adults against measles and rubella.

Discussion then turned to measles vaccination and revaccination. Dr. Saul Krugman has proposed that it might be advisable to stop recommending revaccination of previous recipients of killed measles vaccine. Dr. Krugman's rationale is based on the fact that the incidence of measles in the United States is presently at such a low point that the likelihood of future exposure to natural measles in these persons is quite low. Additionally, Dr. Krugman had recently seen a patient in whom atypical measles syndrome was apparently precipitated by vaccination with live measles vaccine some 12-14 years after initial vaccination with killed vaccine. The frequency of this occurrence is unknown, but seems clearly to be quite low. Dr. Krugman also notes that revaccination with live virus vaccine may sometimes fail to protect those who previously received killed vaccine. In discussion, members indicated that although the risk of exposure to wild virus in the United States seems to be currently quite low, the number of cases of natural measles still greatly outnumbers all cases of atypical measles. Thus, the risk of exposure to natural measles exceeds the rare risk of atypical measles, especially that after attenuated vaccine. Moreover, measles occurs at high levels in the rest of the world, and the possibility of exposure abroad or exposure in the U.S. to imported measles could precipitate atypical measles. This likelihood seemed greater than the possibility of inducing atypical measles syndrome by vaccination.

Dr. Hinman reported that in some areas revaccination of children immunized between 12 and 15 months of age was being carried out in outbreak settings. This is not inconsistent with current ACIP recommendations, although it is not specifically recommended by the ACIP. It was also reported that in some areas there was reluctance to vaccinate children below 12 months of age in outbreak settings (as recommended by ACIP) because of the concern that there might be a lesser response to revaccination in these individuals. Committee members pointed out that this speculation was based on a single study and that there was not indication that this phenomenon might be of practical significance if it occurred. Because of data from the measles outbreak in Pennsylvania and other outbreaks which indicated that a history of having had measles as indicated on a school record was not an adequate indicator of immunity, the Committee was questioned as to whether they wished to drop "physician-diagnosed measles" as acceptable proof of immunity. They did not. Lastly, current efforts to promote the adoption and use of standardized immunization records were described and the Committee was asked if it wished to "officially" endorse this activity. They did.

In the discussions of these issues, Dr. Dandoy shared her experience in attempting to establish requirements that all health workers with potential contact with pregnant women be immunized against rubella. The medical and hospital associations in Arizona objected vehemently to this policy because the numbers of such employees were quite large and the expense considerable. Dr. Chin shared a similar experience in California indicating that he had been obliged to sharpen the requirements considerably so as to concentrate on workers in facilities where a majority of patients being seen were pregnant women. Drs. Sanford and Hinman reported policies in other places which required the immunization of employees as a prerequisite to issuing work certificates.

Regarding the rubella immunization of "adults," Dr. Cheng reported that since the Air Force has begun to vaccinate its recruits routinely against rubella and measles, there have been 4 cases in which a vaccinee, who had received rubella vaccine, was subsequently found to be pregnant. The outcomes of these pregnancies were 3 normal infants and 1 infant with congenital rubella syndrome. The latter had been proven by a laboratory test to be due to natural rubella not the vaccine virus.

Regarding the advisability of requiring rubella and measles vaccination for entry into high school and/or college, Dr. Sanford suggested that the Committee might wish to address the immunization of college students as a separate subject. Dr. Chin noted considerable reservation about requirements for immunization for college entry because the health records of college students were quite inferior to those in the public schools. Dr. Marine thought that some note should be made of the important progress going on in the immunization of military recruits. Dr. Dandoy suggested the possibility of a "parents guide" to immunization because of the increasing role of day-care centers and other societal changes which affect exposure of children.

After discussing these issues, the Committee decided that it was unnecessary to change the existing recommendations on measles and rubella vaccines. However, they asked that the rubella statement be reviewed at

the next meeting, and that the minutes at this meeting include a statement reflecting their thinking on these issues. The following was approved by the Committee:

RUBELLA

Official health agencies should take steps, including development and enforcement of school immunization requirements, to assure that all students in schools and children in day-care settings are protected against rubella, unless contraindicated.

IMMUNIZATION OF ADULTS AGAINST MEASLES AND RUBELLA

Current patterns of measles and rubella occurrence indicate that outbreaks of these diseases continue to be reported in adolescent and young adult population groups. Increased attention to school immunization requirements should reduce the incidence in those of school age. Further control of these diseases will require increased emphasis on vaccinating susceptible individuals who have left high school. The military services have instituted routine measles and rubella immunization of susceptible recruits. Colleges and other settings where young adults congregate should strongly consider immunization requirements for entry. Health care providers should carefully review immunization status of young adults and provide vaccination to those who are not immune and who do not have contraindications.

Dr. Marjorie Pollack reviewed preliminary data from the new system for surveillance of reactions to immunization which was inaugurated in 1978. To date, there have been over 1,400 reports received of a wide variety of clinical illnesses occurring within a 30-day period following vaccination. A large proportion were local reactions, most commonly observed following DTP vaccination. In discussion, the Committee recommended that any reactions that seemed to involve the central nervous system should be investigated with considerable care in view of the observed association between the Guillain-Barre Syndrome and the A/New Jersey influenza vaccines used during the "Swine Flu" campaign of 1976.

INFLUENZA

Following the break, discussion turned to the recommendations for the use of influenza vaccines in 1980-81. Dr. Dowdle initiated the discussions by reviewing events since the Surgeon General's meeting on influenza in Bethesda in January 1980 (attended by the ACIP). The composition of the vaccine recommended at that meeting had been a trivalent preparation incorporating antigens of A/Brazil, A/Texas, and B/Singapore. At that time A/Bangkok influenza virus had been isolated, but too little was known of its prevalence to warrant recommendation for inclusion in the vaccines. The World Health Organization (WHO) had made a similar recommendation in early January. In February, because of the wider distribution of A/Bangkok in the interim, the WHO recommended that the A/Bangkok strain replace the A/Texas strain in the vaccines for 1980-81. In March, the USPHS Interagency

Workgroup on Influenza reviewed the data again, along with the WHO recommendation, and recommended to the Surgeon General that A/Texas be replaced with A/Bangkok in vaccines for use in the United States. The Surgeon General subsequently confirmed this recommendation and informed the vaccine manufacturers and the various PHS agencies involved. Dr. Dowdle also noted that there had been significant excess mortality during the current influenza season from influenza B.

Dr. Thacker then summarized the progress of his staff in exploring alternative ways of analyzing the weekly data on deaths to detect excess mortality. He is seeking methods that can alleviate some of the difficulties found in using the Serfling-Sherman model, which is the standard method in use at CDC for interpreting the influence of influenza on various forms of mortality. The Committee encouraged continued exploration of alternatives recognizing that the current method, though having served well in detecting the presence of influenza outbreaks, was subject to difficulties in interpretation which were at times difficult to explain to persons not thoroughly indoctrinated in concepts of influenza epidemiology.

Dr. Schonberger presented data on the occurrence of Reye syndrome during the 1979-80 influenza season. A total of 252 cases was reported. States in which there were widespread outbreaks of influenza experienced an incidence of Reye syndrome which exceeded the incidence in states without widespread influenza outbreaks by a ratio of 1.4 to 1. Among the 252 cases, there were 52 fatal cases for a case fatality ratio of 22 percent. Dr. Dandoy inquired as to the relationship between Reye syndrome and aspirin that had been suggested by some. Dr. Schonberger responded that in a recently reported small study in Arizona there was an increased proportion of Reye syndrome cases (7/7) who used aspirin than of controls (8/16). The same study suggested a correlation between the amount of aspirin used and the severity of Reye syndrome. It is noteworthy that the effects of salicylate toxicity are in some respects similar biochemically to the effects of Reye syndrome. There was substantial variation from state to state in the severity of cases seen which may have to do with case definitions. Dr. Jordan indicated that NIAID would conduct a workshop on Reye syndrome this year. The main focus will be on the management of Reye syndrome. Another item will be criteria for diagnosis. CDC will be asked to participate.

Drs. Nolan and Kendal made brief presentations on influenza morbidity surveillance and virus surveillance during the current influenza year. Widespread outbreaks of influenza occurred in somewhat less than half of the states with regional outbreaks in about 15 others. The Center used several morbidity surveillance mechanisms as has been characteristic in recent years. Viral surveillance revealed that influenza B isolates were made in all but approximately ten U.S. states indicating very widespread activity of influenza B. Influenza A (H3N2) strains were next most prevalent with isolates recorded in 8 states. Influenza A (H1N1) isolates were made in Delaware, Maryland, and Texas. Influenza B viruses were isolated from individuals over 65 years of age, and outbreaks in nursing homes have occurred in several states. The majority of the influenza B isolates were serologically

related to B/Singapore/222/79. In viewing influenza world-wide, it seemed that influenza A (H3N2) seemed to be causing epidemics in many countries, and in those countries, causing more cases than influenza A (H1N1). The majority of isolates were cross reactive to A/Texas and A/Bangkok but later representative isolates seemed more closely related to A/Bangkok.

In the discussion Dr. Chin noted that his unit had investigated an outbreak of influenza caused by A (H3N2) in Shriners who had made a trip down the Mississippi River on a paddle-wheel craft, the "Delta Queen". Dr. Vernon suggested that the episode might be considered "an outbreak of Shrine Flu".

Dr. Noble presented information on studies of vaccine efficacy at the University of Georgia. Influenza-like disease had occurred in the study group but results have not been decoded; nothing firm can yet be said about efficacy.* Dr. DeStefano reported data estimating vaccine efficacy in an Indiana boys' school with a population of 262 cadets. The population was vaccinated in the fall. One hundred and ninety-one students were fully vaccinated, 30 were not. Following the semester break, an outbreak of influenza had occurred at the school in February. Attack rates approximated 14 percent among the fully vaccinated and 39 percent among the nonvaccinated. Vaccine efficacy approximated 63 percent. The agent isolated was cross-reactive to B/Singapore and B/Buenos Aires.

Dr. Hinman opened discussion of the draft of influenza vaccine recommendations for 1980-81 which had been received and reviewed by the Committee members in advance of the meeting. In discussion, members expressed some concern about the lack of "priming" in persons under 28 years of age. Should all such persons receive two doses? Dr. Kalish presented data on 4,000 college students, ages 14 to 26 years, noting that 20 to 35 percent were doubly sero-negative at 26 years of age. Therefore, one might consider that one-third of the population (those under 26) are unprimed. Dr. Marine wondered if there were specific data confirming that two doses actually provide better protection than one dose in such persons. Dr. Sanford felt that the potential incremental increase in efficacy in a high-risk individual would certainly be worth the second dose. There being little additional discussion, Dr. Hinman asked the Committee to review the draft overnight and report any final recommended changes to him by noon the following day.

RABIES VACCINE

In the few minutes remaining before lunch, Dr. Dandoy queried the status of the licensing of Merieux rabies vaccine. Dr. Ennis reported that it was still anticipated that within approximately a month the vaccine would be licensed for distribution in the U.S. Dr. Dixon indicated that the Canadian National Advisory Committee on Immunization, in its spring meeting, had decided to recommend a regimen of five doses of human diploid rabies vaccine rather than the current six dose recommendation made by groups affiliated with the WHO.

*Analysis of data now reveals that too few influenza B virus infections occurred to provide a basis for evaluation of vaccine efficacy.

SMALLPOX VACCINE

After lunch, Dr. Lane introduced discussion of the draft revised recommendations on smallpox vaccine which had been previously distributed to the Committee members. He noted several issues which had come to mind in considering the revision including: The role, if any, for smallpox vaccine in protecting laboratory workers handling orthopox viruses other than smallpox and vaccinia; how much vaccine should be distributed in the future and CDC's role; whether or not state health departments should become repositories for vaccine; whether or not CDC should continue to participate in the distribution of vaccinia immune globulin (VIG), etc. During discussion, the need to address the issue of overuse of smallpox vaccine by approaching practicing physicians directly was emphasized. Dr. Finkel suggested that the AMA News be asked to publish information regarding the eradication of smallpox and the need to eliminate smallpox vaccination. Regarding potential restrictions of vaccine distribution, Mr. Douglas B. Reynolds, Connaught Laboratories, indicated that although smallpox vaccine is still distributed from the Swiftwater, Pennsylvania, facility of Connaught, distribution has been greatly restricted by the company; this had produced some "flack" from customers. Connaught expected to completely discontinue distribution after the WHO statement at the World Health Assembly confirming the global eradication of smallpox. This news was received by the Committee with appreciation and enthusiasm.

Dr. Sanford suggested that the draft statement be sharply revised, eliminating everything except the current "Introduction". He felt it inconsistent to suggest no further use for smallpox vaccine except in laboratory workers, and then to consume several pages describing how the vaccine is to be used. Several other Committee members agreed, noting that the nature and length of a short concise statement would be a message in itself. Discussion turned to whether or not licensure to manufacture smallpox vaccine could be withdrawn as an approach to reducing vaccine availability. Dr. Ennis indicated this was not an appropriate approach; a preferred method would be to distribute vaccine via PHS clinics. This would certainly result in a tightened distribution. Dr. Nakano suggested that it would be worthwhile maintaining a description of the technique of vaccination because it would be useful to have this written in some reasonably available form should a situation arise similar to the current "Italian scare". Dr. Lane indicated that while he had initially supported an abbreviated statement, he felt some responsibility to include comments on technique because the technique of administering smallpox vaccine is significantly different from ordinary inoculations and the various techniques are different from each other. It was pointed out that the package insert for the vaccine could contain this information. Dr. Smith wondered if one could always be assured of ACIP influence on the package insert. Dr. Jordan raised the issue about protecting workers dealing with ectromelia virus. Dr. Nakano indicated that ectromelia virus is not a human pathogen. Dr. Dixon read the short statement on smallpox vaccine made by the Canadian National Advisory Committee on Immunization.

Dr. Lane reported that at least one manufacturer had expressed willingness to stop manufacturing smallpox vaccine if the ACIP makes a strong statement.

Mr. Reynolds of Connaught indicated that his company's position would be a similar one. He further suggested that if the only legitimate use of the vaccine was in vaccinating pox virus laboratory workers, CDC could identify such labs to the Bureau of Biologics so that manufacturers would be prohibited from distributing vaccine anywhere else. Dr. Dandoy then recommended that CDC prepare a plan for restricting the distribution of smallpox vaccine utilizing the various suggestions that had come up. Regarding the VIG distribution system, Drs. Dandoy and Kilbourne indicated that there was no alternative to maintaining the VIG system so as to assist the victims of the misuse of smallpox vaccine.

Following further discussion, Chairman Vernon requested that Dr. Lane prepare an abbreviated statement on smallpox vaccine for consideration by the Committee the following morning if possible. Dr. Jones summarized the recent suspected smallpox case in Italy, which was shown by electron microscopy at CDC to be a herpes virus consistent with varicella. Responding to questions, Dr. Nakano noted the initial anxieties about "whitepox variant" observed in Cynomolgus monkeys. In fact, the "whitepox agent" was not really similar to smallpox. Initial concern that there might be a potential animal reservoir for smallpox or for an agent from which smallpox might easily mutate, was not well founded. Dr. Erdtmann reported that smallpox vaccination was discussed at the recent Armed Forces Epidemiology Board meeting. The Board withdrew its earlier recommendation of smallpox vaccination among military dependents except at the request of the dependent. He suggested that the ACIP statement recommendation include verbiage emphasizing the distinction between recommendation against vaccination in the civilian population and the AFEB recommendation for continued vaccination of active duty military personnel.

HEPATITIS*

Following the afternoon break, the discussion turned to hepatitis. Dr. Vernon introduced the discussion of the draft hepatitis statement drawing attention to the controversies, uncertainties, and gaps in knowledge which were summarized in the minutes of the winter meeting. In the interim since that meeting, both Dr. Dandoy and Dr. Hayes proposed that the Committee formulate a short statement containing those recommendations which could be firmly made, and present the uncertainties as objectively as possible without exhaustive detail. The statement of the Canadian National Advisory Committee on Immunization was mentioned as an excellent example. Therefore, staff of the CDC had prepared a short draft statement which included alternative proposed recommendations for the use of HNIG and HBIG in the prophylaxis of Hepatitis B following acute exposures. This draft had been sent to the Committee members before the meeting. Also in the interim, Committee members had been sent a series of 20 articles concerning the prevention of Hepatitis B with immunoglobulins by the staff of the Hepatitis Laboratory Division, CDC, and the Executive Secretary (bibliography available upon request).

*In response to a desire expressed during the ACIP winter meeting, the Executive Secretary has chosen to use the "new" terminology for globulin products throughout the minutes. HNIG refers to human normal immune globulin, previously known as "immune serum globulin" or ISG.

Chairman Vernon solicited general comments about the Committee's reactions to the short draft recommendations and expressions of how the Committee wished to proceed. Several Committee members expressed a favorable reaction to the shortened version and the desire to deal with the remaining unresolved issues so that a useful statement could be soon approved for publication. Chairman Vernon asked each member in turn to share his or her views about remaining issues which require resolution. In so doing, the members raised several scientific issues for which data were unavailable, conflicting, or not interpretable.

Some of these issues of concern included: the influence of the quantity of virus in the inoculum on the efficacy of prophylaxis against Hepatitis B; the role of HBIG in prolonging the incubation period of Hepatitis B; the possible need for both pre- and post-exposure treatment in some situations; the need for more data on the prophylaxis of Hepatitis B in newborns; the need to define if an increase in effectiveness could be attributed to HBIG over HNIG especially in view of the manyfold greater cost of the product; the need for more data on the protection of close contacts (i.e. spouses) exposed to clinical Hepatitis B; the management of single point and ongoing exposure; the management of Hepatitis A outbreaks in day-care centers; the need to present recommendations that would be meaningful both for Public Health practice as well as private medical practice.

There were four major questions which were of most concern to the Committee:

- (1) Can a minimum protective titer of anti-HBsAg be defined?
- (2) What is the titer of anti-HBsAg which can now be reliably expected in HNIG?
- (3) Was the apparent protective effect of HNIG observed in several studies due to some other factor, such as active immunization with HBsAg occultly present in the HNIG?
- (4) Are there sufficient data to establish greater efficacy of HBIG over HNIG in the post-exposure setting?

Given the possibility that inadequate information was available on these points, the Committee assumed the formidable challenge of determining whether or not there was any clearly documented superiority of HBIG over HNIG for the prophylaxis of Hepatitis B, and whether this advantage, if present, was sufficient to warrant the preferential use of HBIG especially in view of its cost. Chairman Vernon suggested that the studies available to the Committee be systematically reviewed by the Committee as a whole. In those studies which showed equivalent protection by HNIG and HBIG, might there be confounding variables which could alter the results and be erroneously interpreted? After a substantial period of discussion of this question, the only factor identified which could have led to faulty conclusions, would be active immunization of the recipients of HNIG by undetected HBsAg occultly present in the globulin product. Attention focused on the study by Grady which compared HBIG (anti-HBsAg titer of 1-500,000) with HNIG (anti-HBsAg titer of 1-50) and with an "intermediate titer" globulin (anti-HBsAg of 1-5,000). No differences were observed in the efficacy of these products in preventing Hepatitis B among persons who had been acutely exposed to HBsAg positive blood following needle sticks. The study provided data which indicated that HNIG with an anti-HBsAg titer of 1 to 50 was protective. This finding, if real, was of great help in defining a minimum titer of anti-HBsAg needed for efficacy. Looking for any possible

alternative explanations of the findings, the Committee raised the question: Did the HNIG product (with anti-HBsAg titer of 1-50) contain complexed HBsAg which could have led to "active" immunization of the recipients producing the appearance of effective passive immunization? The Committee discussed this possibility at considerable length and asked Dr. Francis to telephone Dr. George Grady, senior author of the study, to determine whether or not such a thing could have occurred. The meeting was adjourned until the following morning.

The meeting was reopened at 8:30 a.m., May 6, with continuing discussion of the prophylaxis of hepatitis. Dr. Francis reported on his conversation with Dr. Grady of the previous evening. Dr. Grady reported that the plasma from which the HNIG products he used had been developed, was prescreened by counterimmunoelectrophoresis in the attempt to eliminate the possibility of there being complexed HBsAg. It appeared most unlikely that the observation of equivalent efficacy could have been due to "active" immunization (with cryptic HBsAg) in the group receiving the low titer HNIG product. The lack of difference in observed efficacy between the various tested groups could not be explained by active immunization.

Chairman Vernon asked that Dr. Grady's written response to the question be solicited and Dr. Francis agreed to do so.

At this point, Dr. Hayes suggested that the Committee adopt option B regarding the post-exposure prophylaxis of Hepatitis B in situations of acute exposure, namely that HBIG or HNIG be recommended without preference.

Dr. Vernon indicated his perception that the Committee, having looked at all of the studies, seemed comfortable with the conclusion that immune globulin was efficacious and that HBIG offered no firmly documented advantage over HNIG, providing the HNIG had an anti-HBsAg titer of 1 to 100 or higher. The superiority of HBIG had not been firmly established and the Committee could not preferentially recommend the product with the knowledge that a much cheaper product offered similar protection.

Dr. Gerety confirmed that among commercial lots of HNIG presented to Bureau of Biologics, FDA, for approval during the period of 1975 to 1979, 100 percent had had anti-HBsAg titers of 1 to 100 or higher. Committee members expressed the view that before recommending HNIG as equivalent to HBIG, they would like to be reassured that every lot of HNIG would contain this amount or more of anti-HBsAg. The Chairman asked Dr. Gerety to discuss with Dr. Meyer the feasibility of establishing some sort of mandate assuring that each lot released would have such a minimum titer.

The Committee then proceeded to review the draft page by page. Changes were made in the text in the description of the globulin products; the recommendations for post-exposure prophylaxis of Hepatitis A in day-care centers and the pre-exposure prophylaxis of Hepatitis A in travelers; the

text on immunoglobulins and Hepatitis B was substantially edited, option B was confirmed as the Committee's choice for post-exposure prophylaxis following acute exposures to Hepatitis B.

The Committee indicated that no firm recommendations could be made regarding the prophylaxis of Hepatitis B in newborns nor the pre-exposure prophylaxis of Hepatitis B in sexual contacts. Regarding hemodialysis units, a statement was added indicating that no advantage had been found for HBIG over HNIG in this setting.

Dr. Francis was asked to make the necessary changes in the draft and to consider developing a table summarizing the recommendations and a glossary of the important technical terms used in the text. Dr. Curran suggested that because of the increasing epidemiologic importance of homosexual contact in the transmission of Hepatitis B, homosexuality be referred to specifically in the section on sexual contacts.

Chairman Vernon asked that the appropriate changes be made in the text as soon as possible and that a revised draft be circulated for the review and comment of the Committee hopefully by the end of June.


FOLLOW-UP ON INFLUENZA AND SMALLPOX

Committee members had considered the draft on influenza overnight, had found it fully acceptable and approved it for publication as soon as possible. Dr. Jones provided the Committee with an amended smallpox vaccine statement which the Committee members were to take with them to review and amend within ten days.

CONCLUSION

In the absence of Dr. Foege, and due to the press of time, Chairman Vernon dispensed with his usual summary of the meeting. Dr. Millar noted with regret that Drs. Kilbourne and Vernon would be leaving the Committee after this meeting. He announced with pleasure that Dr. Catherine Wilfert had agreed to serve as Chairperson of the Committee beginning with the next meeting. Mr. William Watson expressed the appreciation of the Center for Disease Control to Drs. Kilbourne and Vernon for their exceptionally fine contributions to the Committee and presented each with a certificate of appreciation. Dr. Millar announced that Mrs. Harriet Crutchfield, who had served the Committee as Committee Assistant for four years, would soon leave the Center to accept a new position. He expressed his gratitude to Mrs. Crutchfield for superb service to three Executive Secretaries (Drs. Dull, Hinman, and Millar) and presented her with a certificate of appreciation. Dr. Millar indicated that a search for a replacement for Mrs. Crutchfield was underway and approaching conclusion. The meeting adjourned at 12:15 p.m.

I hereby certify that, to the best of my knowledge, the foregoing summary of minutes is accurate and complete.

 7-24-80
Thomas M. Vernon, Jr., Chairman Date